

WHAT IS CLAIMED IS:

1. A method for aircraft telecommunications comprising the steps of:
  2. identifying a current service volume;
  3. identifying an available VHF communications channel frequency from a table of preferred VHF communications frequencies associated with said current service volume;
  5. selecting a preferred communications attribute from a table of attributes associated with said current service volume and according to said available VHF communications channel frequency; and
  8. effecting airborne communications utilizing said preferred communications attribute.
1. 2. The method of claim 1 wherein said predefined service volumes comprise geographic regions other than rectangular regions.
1. 2. 3. The method of claim 1 wherein said service volumes further include at least one subset of area.
1. 2. 4. The method of claim 1 wherein said step of selecting a preferred communications attribute includes the step of selecting a VHF communications channel.
1. 2. 5. The method of claim 1 wherein said step of selecting a preferred communications attribute includes the step of selecting a SATCOM communications channel.
1. 2. 6. The method of claim 1 wherein said step of selecting a preferred communications attribute includes the step of selecting an HF communications channel.
1. 2. 3. 7. The method of claim 1 further comprising the step of manually selecting a second preferred communications attribute different than said preferred communications attribute.
1. 2. 8. The method of claim 1 wherein said step of identifying a current service volume further comprises the steps of:
  3. determining a current aircraft position; and

4 comparing said current aircraft position with a set of predefined service  
5 volumes to identify the current service volume encompassing said current aircraft position.

2 defining a plurality of service volumes having nonrectangular boundaries;

3 associating a set of preferred communications attributes with each of said  
4 plurality of service volumes;

5 identifying a current service volume;

6 selecting a preferred communications attribute from said set of preferred  
7 communications attributes associated with said current service volume; and

1                   11.       The method of aircraft telecommunications of claim 9 wherein said  
2       step of defining a plurality of service volumes further comprises the step of defining at least  
3       one area located within at least one service volume.

1                           13.     A computer program product for use on an aircraft, the computer  
2     program product comprising:

3 a computer readable storage medium having computer readable program code  
4 means embodied in said medium, said computer readable program code means comprising:

5 a first computer instruction means for identifying a current service  
6 volume to be used for airborne communications;

7 a second computer instruction means for identifying an available VHF  
8 communications channel frequency from a table of preferred VHF communications  
9 frequencies associated with said current service volume;

10 a third computer instruction for selecting a preferred communications  
11 attribute from a table of attributes associated with said current service volume and according  
12 to said available VHF communications channel frequency; and

13 a fourth computer instruction means for effecting airborne  
14 communications utilizing said preferred communications attribute.

1                           14. The computer program product of claim 13 wherein said first computer  
2 instruction means further includes a fifth computer instruction means for reading a current  
3 position of the aircraft.

1                           16.     The computer program product of claim 13 wherein said first computer  
2 instruction means further includes a fifth computer instruction means for identifying a current  
3 service area located within said current service volume.

3 an input for receiving a message to be transmitted from an aircraft;

4 a logic device for identifying a preferred communications attribute to be  
5 utilized in transmitting said message as a function of: a service volume; and at least one of a  
6 VHF frequency preference and a channel preference; and

7 a router for effecting airborne communications according to said preferred  
8 communications attribute.

1                           18.     The communications apparatus of claim 17 wherein said logic device  
2     comprises a computer readable medium.

1                   19.     The communications apparatus of claim 18 wherein said computer  
2 readable medium comprises a PCMCIA card.

1                   20.     The communications apparatus of claim 17 wherein said logic device  
2 comprises a programmable logic device.

1                   21.     The communications apparatus of claim 17 wherein said input is  
2 coupled to receive a position information of the aircraft and wherein said preferred  
3 communications attribute is determined according to said position information.

1                   22.     The communications apparatus of claim 17 further comprising a  
2 controller useful for controlling display of communications information on a cockpit display.

1                   23.     The communications apparatus of claim 17 wherein said apparatus  
2 comprises a CMU.

1                   24.     The communications apparatus of claim 17 wherein said apparatus  
2 comprises an Air Traffic Service Unit (ATSU).

1                   25.     The communications apparatus of claim 17 wherein said apparatus  
2 comprises a Data Management Unit (DMU).

1                   26.     The communications apparatus of claim 7 wherein said apparatus  
2 comprises an Airborne Communications Addressing and Reporting System (ACARS)  
3 Management Unit.